# BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA DOCKET NO. 2013-3-E

)	
)	REBUTTAL TESTIMONY
)	OF KIM H. SMITH FOR
)	<b>DUKE ENERGY CAROLINAS, LLC</b>
	)

- 2 A. My name is Kim H. Smith. My business address is 526 South Church Street,
- 3 Charlotte, North Carolina.
- 4 Q. DID YOU OFFER ANY DIRECT TESTIMONY IN THIS PROCEEDING?
- 5 A. Yes, I submitted direct testimony in this proceeding on August 2, 2013.
- 6 O. HAVE YOU REVIEWED THE TESTIMONY SUBMITTED BY KEVIN
- 7 O'DONNNELL ON BEHALF OF SOUTH CAROLINA ENERGY USERS
- 8 **COMMITTEE** ("SCEUC")?
- 9 A. Yes.
- 10 O. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
- 11 A. The purpose of my testimony is to address some assertions and inaccuracies in
- 12 SCEUC witness O'Donnell's testimony.
- 13 Q. WHAT ARE SOME OF THE STATEMENTS THAT IN WITNESS
- 14 O'DONNELL'S TESTIMONY THAT ARE INACCURATE?
- 15 A. Witness O'Donnell states on page 2, line 23 of his testimony that "on August 2,
- 16 2003 [sic], Duke asked to increase its fuel rate from 0.5882 cents per kWh to 0.6576
- 17 cents per kWh." This statement is inaccurate. On August 2, 2013, Duke Energy
- Carolinas, LLC ("DEC" or the "Company") filed its fuel cost recovery filing before
- this Commission in which it requested an increase in the base fuel factor from
- 20 1.8846 cents per kWh to 2.2049 cents per kWh. (See Smith Direct Testimony, p. 5,
- 21 lines 19 -22). As a result, the cents per kWh costs that witness O'Donnell cites as
- DEC's current and proposed overall fuel rates do not accurately reflect the fuel
- factors that the Company filed in its application.

1	Q.	WITNESS O'DONNELL ASSERTS THAT DEC OFFICIALS TOLD
2		INDUSTRIAL CUSTOMERS IN JULY 2013 THAT THERE WOULD BE
3		LITTLE CHANGE IN FUEL RATES IN 2013. DO YOU AGREE WITH
4		THAT ASSERTION?
5	A.	No, I do not. I am not aware of any conversation that DEC officials had with
6		industrial customers whereby DEC officials informed them that there would be little
7		change in their fuel rates. I am aware, however, that in late July 2013, DEC officials
8		communicated with a representative for SCEUC whereby DEC officials informed
9		SCEUC through its representative that (a) DEC's initial proposed fuel rate that it had
10		not yet filed was much higher than the forecasted amount communicated to both
11		SCEUC and ORS in a letter from me dated May 31, 2013, and that (b) DEC planned
12		to pare down that increase when it actually filed its application to 7.1% for
13		industrials, as compared to a projected high end of the range of 5.8% as
14		communicated in the May 31, 2013 letter. The Company subsequently made its fuel
15		cost recovery application to this Commission on August 2, 2013, which, if approved,
16		would have resulted in a fuel rate increase of 6.8% for its industrial customers in
17		South Carolina.
18		Subsequent to DEC's August 2nd filing, DEC, in consultation with the South
19		Carolina Office of Regulatory Staff ("ORS"), refreshed its assumptions related to
20		certain commodity costs. The volatility of commodity prices allowed us to decrease
21		the fuel factor. As referenced in the filing of the Settlement Agreement today
22		between DEC and ORS, DEC is now asking for a 5.64% fuel rate increase for
23		industrial customers. This percentage falls within the range of a .1% - 5.8% increase

1		that was forecasted and provided to SCEUC in DEC's aforementioned May 31,
2		2013 letter.
3	Q.	DO YOU BELIEVE, AS WITNESS O'DONNELL ASSERTS, THAT DEC
4		"MISSED" ITS FUEL FORECAST?
5	A.	No, I do not. The Company is sensitive to fuel cost increases to its customers and
6		tries to ensure that its communications to its customers depict as accurately as is
7		reasonably possible the potential impacts of fuel rate increases or decreases. As a
8		result, the Company specifically referenced its under-collection/over-collection of
9		fuel costs in the forecast that it communicated to the ORS and SCEUC on May 31,
0		2013. Specifically, DEC stated:
11 12 13 14 15 16 17 18 19 20 21 22 22 24		The 2nd Quarter 2013 forecast results are higher than the current fuel factors, due to the completion of the give back of an over recovery in the current rates. Based on projections of fuel costs for the various sources of energy, environmental costs, forecasts of usage by South Carolina customers, and taking into account prior period over/under recovery, and including estimated merger savings, Duke Energy Carolinas expects to request a fuel factor between 1.9 and 2.2 cents/kWh for all classes of customers in its next fuel proceedingBeginning October 1, 2013, the projected increase to a range between 1.9 and 2.2 cents/kWh for all classes of customers would result in an increase in the average South Carolina industrial customer's power bill of .1 to 5.8 percent.
26		(emphasis added). Thus, it is apparent to me from that communication that DEC
27		was very aware of its forecast, the under-collection/over-collection issue, and the
28		fact that its fuel cost increase could affect industrial customers anywhere from .1%
29		to 5.8%.
30	Q.	WITNESS O'DONNELL ASSERTS THAT A MONTHLY ANALYSIS, IF
31		NOT MORE FREQUENT, OF DEC'S FUEL COSTS WOULD HAVE

1		EXPOSED THE VARIATION IN FUEL COSTS LEADING TO THIS
2		"UNUSUALLY HIGH FUEL RATE INCREASE." DO YOU AGREE WITH
3		THAT STATEMENT?
4	A.	No. The Company does in fact have a monthly analysis of what was occurring with
5		its over/under-collection balance. Schedule 4 of DEC's May 2013 Monthly Fuel
6		Report, which it filed publicly with the Commission (and which is attached here as
7		Smith Rebuttal Exhibit A), clearly demonstrates that the over-collection balance
8		steadily declined as would be expected, because the current fuel rates were intended
9		to return to customers approximately \$66 million of previously over-collected funds
10		and create no new over- or under-collection.
11	Q.	DOES THIS CONLUDE YOUR TESTIMONY?
12	A.	Yes, it does.
13		

#### DUKE ENERGY CAROLINAS SUMMARY OF MONTHLY FUEL REPORT SC Code Ann. §58-27-865 (Supp. 2012)

Line <u>No.</u>	Fuel Expenses:		May 2013
1	Fuel and fuel-related costs	\$	134,527,631
2	Less fuel expenses (in line 1) recovered through intersystem sales (a)		14,142,431
3	Total fuel and fuel-related costs (line 1 minus line 2)	<u>\$</u>	120,385,200
4 5	MWH sales: Total system sales. Less intersystem sales		6,478,307 381,938
6	Total sales less intersystem sales		6,096,369
7	Total fuel and fuel-related costs (¢/KWH) (line 3/line 6)	-	1.9747
8	Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 4 + Line 10)	-	1.8899
9 10 11 12 13 14	Generation Mix (MWH): Fossil (by primary fuel type): Coal Biomass Fuel Oil Natural Gas - Combustion Turbine Natural Gas - Combined Cycle Total fossil		1,964,042 - 48 31,844 538,509 2,534,443
15	Nuclear 100%		5,351,943
16 17 18	Hydro - Conventional Hydro - Pumped storage Total hydro		305,103 (82,262) 222,841
19	Solar Distributed Generation		1,468
20	Total MWH generation		8,110,695
21	Less joint owners' portion		1,361,243
22	Adjusted total MWH generation		6,749,452
	(a) Line 2 includes: Fuel from intersystem sales (Schedule 3) Fuel in loss compensation Total fuel recovered from intersystem sales	\$	14,120,399 22,032 14,142,431

Note: Detail amounts may not add to totals shown due to rounding.

Exhibit A Schedule 2 Page 1 of 2

## DUKE ENERGY CAROLINAS DETAILS OF FUEL AND FUEL-RELATED COSTS SC Code Ann. §58-27-865 (Supp. 2012)

Fuel and fuel-related costs:	 May 2013
Steam Generation - FERC Account 501 0501016 coal blending merger savings 0501016 coal procurement merger savings 0501016 transportation merger savings 0501110 coal consumed - steam 0501222-0501223 biomass/test fuel consumed @ avoided fuel cost 0501310 fuel oil consumed - steam 0501330 fuel oil light-off - steam	\$ 1,493,125 (117,769) 345,346 73,153,794 - 139,025 660,581
Total Steam Generation - Account 501	75,674,102
Environmental Costs 0509000, 0557451 emission allowance expense 0502020, 030, 040 reagents expense 0502160 reagent procurement merger savings Emission allowance gains Total Environmental Costs	 9,482 2,194,055 5,741 (28,750) 2,180,528
Nuclear Generation - FERC Account 518 0518100 burnup of owned fuel 0518600 nuclear fuel disposal cost Total Nuclear Generation - 100% Less joint owners' portion Total Nuclear Generation - Account 518	 28,452,062 5,033,686 33,485,748 8,348,014 25,137,734
Other Generation - FERC Account 547 0547100 natural gas consumed - Combustion Turbine 0547101 natural gas consumed - Combined Cycle 0547123 gas capacity merger savings 0547200 fuel oil consumed - Combustion Turbine Total Other Generation - Account 547	 1,801,619 18,620,698 69,022 11,499 20,502,838
Solar Distributed Generation @ Avoided Fuel Cost	61,080
Total fossil and nuclear fuel expenses included in base fuel component	123,556,282
Fuel component of purchased and interchange power per Schedule 3	9,439,785
Fuel related component of purchased power (economic accrual)	1,531,564
Total fuel and fuel-related costs	\$ 134,527,631

Note: Detail amounts may not add to totals shown due to rounding.

Exhibit A Schedule 2 Page 2 of 2

## DUKE ENERGY CAROLINAS DETAILS OF FUEL AND FUEL-RELATED COSTS SC Code Ann. §58-27-865 (Supp. 2012)

Other fuel expenses not included in fuel and fuel-related costs:	May 2013
Net proceeds from sale of by-products	\$ 132,367
0501223 biomass non-fuel avoided cost	<u>.</u>
0501223 biomass excess above avoided cost	<u></u>
0501224 North Carolina incremental renewable fuel	=
0502080, 0502090, 0502150 sorbents	102,879
0509213 RECs consumption expense	=
0518610 spent fuel canisters-accrual	750
0518620 canister design expense	81,346
0518700 fuel cycle study costs	3∕€.
0547127 gas desk merger savings	12,217
Non-fuel component of purchased and interchanged power	 3,471,464
Total other fuel expenses not included	
in fuel and fuel-related costs:	3,800,273
Less Solar Distributed Generation @ Avoided Fuel Cost	(61,080)
Adjusted total other fuel expenses not included in fuel and fuel-related costs:	\$ 3,739,193
Total FERC Account 501 - Total Steam Generation Total FERC Account 518 - Total Nuclear Generation Total FERC Account 547 - Other Generation Total RECs Consumption Expense	75,674,102 25,219,080 20,502,838
Total Reagents Expense Total Gain/Loss from Sale of By-Products Total Emission Allowance Expense Total Gain/Loss from Sale of Emission Allowances Total Purchased and Interchanged Power Expenses	2,302,675 132,367 9,482 (28,750) 14,442,813
Total Merger Savings Excluded from Fuel Recovery	 12,217
Total Fuel, Fuel-Related and Purchased Power Expenses	\$ 138,266,824

Note: Detail amounts may not add to totals shown due to rounding.

### DUKE ENERGY CAROLINAS PURCHASED POWER AND INTERCHANGE SOUTH CAROLINA

May 2013

Schedule 3, SC, Purchases, Month Exhibit A, Page 1 of 2

Purchased Power		Total	Ca	pacity	Non-capacity				
Marketers, Utilities, Other		\$	MW	\$	MWH		Fuel \$		Non-Fuel \$
Alcoa Power Generating Inc.	\$	266,465	-	-	9,265	\$	162,544	\$	103,921
Blue Ridge Electric Membership Corp.		1,268,969	46	\$ 645,178	26,191		380,512		243,279
City of Concord		6,063	-	609	120		(7,659)		13,113
City of Kings Mtn		8,979	3	8,979					-
Haywood Electric		370,050	17	178,603	6,415		116,783		74,664
Lockhart Power Co. MISO		19,272 3	7	19,272	•		2		-
NCMPA		2,106,929			66,973		1,289,215		817,714
Oglethorpe Power		8,250			550		5,032		3,218
Piedmont Electric Membership Corp.		640,479	21	319,417	13,019		195,848		125,214
PJM Interconnection LLC		408,254		-	11,723		249,035		159,219
Rutherford Electric Membership Corp.		83,027	-	-	2,220		67,388		15,639
Southern		(3,080)	-		(140)	)	(1,879)		(1,201)
The Energy Authority		16,540	-	•	585		10,089		6,451
Town of Dallas		584	-	584	•				-
Town of Forest City		19,272	7	19,272					-
TVA		236,290	-	-	9,420		144,137		92,153
DE Progress - Native Load Transfer		3,244,111	-	-	97,651		2,442,017		802,094
DE Progress - Native Load Transfer Savings		207,033	-	-	•		207,033		
DE Progress - Fees		6,176	-	-			400.00-		6,176
Generation Imbalance		214,716	-	-	6,366		128,880		85,836
Energy Imbalance - Purchases Energy Imbalance - Sales		157,572	•	•	2,686		96,119 (53,821)		61,453
Chergy Imbalance - Sales	\$	(63,757) 9,222,197	101	\$ 1,191,914	253,044	\$	5,431,275	\$	(9,936) <b>2,599,008</b>
12									
Purchased Power		Tota!	Ca	pacity		Nor	n-capacity		
Cogen, Purpa, Small Power Producers	<del></del>	\$	MW	\$	MWH		Fuel \$	1	lon-Fuel \$
Active Concepts, LLC	\$	537	-	-	11	\$	449	\$	88
Arndt Farm, LLC		54,765	-		886		36,841		17,924
Belwood Farm, LLC		44,030	-		718		29,877		14,153
Coc Surry, LFG, LCC		157	-		3		112		45
Cherokee County Cogeneration Partners		1,949,762	- :	\$ 174,652	31,600		1,390,260		384,850
City of Charlotte		2,389	100	-	34		1,428		961
Concord Energy, LLC		332,744	-	-	4,781		198,881		133,863
Davidson Gas Producers, LLC		73,665	-	-	1,058		44,029		29,636
Dibrell Farm, LLC		41,610	1.5		697		28,979		12,631
Dixon Dairy Road, LLC		42,016	•	•	686		28,554		13,462
Durham Landfill Electricity, LLC		94,482	-	•	1,629		67,766		26,716
Gas Recovery Systems, LLC Gaston County		144,495 124,350		•	2,131 1,990		88,658 82,767		55,837 41,583
Greenville Gas Producer, LLC		84,476	_	-	1,732		72,035		12,441
Lockhart - Lower Pacolet Hydro		32,429			465		19,355		13,074
Lockhart - Upper Pacolet Hydro		43,786	_		628		26,133		17,653
Lockhart - Minimum Flow		40,704	_		584		24,294		16,410
Lockhart Power Company		74,837	-		1,074		44,666		30,171
Lynwood Solar, LLC		917	-	-	20		835		82
Martin Truex, Jr. LLC		451	-		9		381		70
Mocksville Farm, LLC		55,150	-	•	893		37,140		18,010
Nypro, Inc.		1,664	-	-	33		1,389		275
Ronnie B. Powers		4,693	-	-	94		3,925		768
Spartanburg Water System		9,637	-	-	212		8,836		801
Sun Edison, LLC		202,407	-	-	2,985		124,191		78,216
Tencarva Machinery Company		1,343	-	•	27		1,108		235
Two Lines Farm, LLC		62,367	-	-	1,048		43,580		18,787
WM Renewable Energy, LLC		100,014		-	1,525		63,423		36,591
Other Cogens, Purpa and Small Power Producers	\$	1,475,591 5,095,469	-	\$ 174,652	29,606 87,159	\$	1,452,905 3,922,797	\$	22,686 998,020
TOTAL PURCHASED POWER	\$	14,317,666	101	\$ 1,366,566	340,203	\$	9,354,072	\$	3,597,028
INTERCHANGES IN Other Catawba Joint Owners		7 500 175			200 700		4 270 500		2 145 607
Other Catawba Joint Owners Total Interchanges In		7,522,175 7,522,175		<u> </u>	690,732 690,732		4,376,568 4,376,568	_	3,145,607 3,145,607
INTERCHANGES OUT									
Other Catawba Joint Owners Catawba- Net Negative Generation		(7,397,028)	(866)	(134,209)	(677,111)		(4,290,855)		(2,971,964)
Total Interchanges Out		(7,397,028)	(866)	(134,209)	(677,111)		(4,290,855)		(2,971,964)
Net Purchases and Interchange Power	\$	14,442,813	(765) \$	1,232,357	353,824	\$	9,439,785	s	3,770,671

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS INTERSYSTEM SALES\* SOUTH CAROLINA MAY 2013

Schedule 3, SC, Sales, Month Exhibit A, Page 2 of 2

		Total	Capacity Non-capacity			 		
SALES		\$	MW		\$	MWH	Fuel \$	 Non-fuel \$
Utilities:								
SC Public Service Authority - Emergency Market Based:	\$	16,361	-		-	361	\$ 11,146	\$ 5,215
Exelon Generation Company, LLC		-	-		-	-	(4)	4
NCMPA		125,695		\$	120,833	91	25,717	(20,855)
PJM Interconnection LLC		1,598,886	-		-	25,323	1,171,360	427,526
SC Electric & Gas Market based		63,450	-		-	900	38,055	25,395
The Energy Authority		(40)	-		-	30	807	(847)
TVA		-	-		-	-	9,752	(9,752)
Other:								
Cargill-Alliant, LLC - Mitigation sales		-	-	(1	,310,000)	-	-	1,310,000
DE Progress - Native Load Transfer Savings		713,701			-	-	713,701	-
DE Progress - Native Load Transfer	•	12,359,316	-		-	337,516	11,671,628	687,688
DE Progress - Off System Sales/PJM Share		12,836	-		-	-	-	12,836
DE Progress - Purchases		457,557	-		-	17,161	457,557	-
Generation Imbalance		22,092	-		-	556	20,680	1,412
BPM Transmission		(190,135)						 (190,135)
Total Intersystem Sales	\$	15,179,719		\$(1	,189,167)	381,938	\$ 14,120,399	\$ 2,248,487

<sup>\*</sup> Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

#### Duke Energy Carolinas Over / (Under) Recovery of Fuel Costs May 2013 SC Code Ann. §58-27-865

Line		Γ	Residentia!	Commercial	Industrial	Total
No.		_				
1	S.C. Retail kWh sales	Input	391,252,901	448,536,564	723,764,451	1,563,553,916
Base	fuel component of recovery					
2	Billed base fuel rate (c/kWh)	Input	1.9489	1.9489	1.9489	1.9489
3	Merger fuel savings decrement (c/kWh)	Input	(0.0643)	(0.0643)	(0.0643)	(0.0643)
4	Net billed base fuel rate (¢/kWh)	L2 + L3	1.8846	1.8846	1.8846	1.8846
5	Billed base fuel expense	L1 * L4 /100	\$7,373,552	\$8,453,120	\$13,640,065	\$29,466,737
6	Incurred base fuel rate (¢/kWh)	Input	1.9187	1.9187	1.9187	1.9187
7	Incurred base fuel expense	L1 * L6 / 100	\$7,507,131	\$8,606,256	\$13,887,167	\$30,000,554
8	Difference in ¢/kWh (Billed - Incurred)	L4 - L6	(0.0341)	(0.0341)	(0.0341)	(0.0341)
9	Base fuel over/(under) recovery	L1 * L8 / 100	(\$133,579)	(\$153,136)	(\$247,102)	(\$533,817)
Envi	ronmental component of recovery					
10	Billed rates by class (c/kWh)	Input	(0.0008)	0.0036	0.0097	0.0053
11	Billed environmental expense	L1 * L10 / 100	(\$3,130)	\$16,147	\$70,205	\$83,222
12	Incurred rate by class (¢/kWh)	Input	0.0547	0.0301	0.0184	0.0308
13	Incurred environmental expense	L1 * L12 / 100	\$214,120	\$135,010	\$133,063	\$482,193
14	Difference in ¢/kWh (billed - incurred)	L10 - L12	(0.0555)	(0.0265)	(0.0087)	(0.0255)
15	Environmental over/(under) recovery	L11 - L13	(\$217,250)	(\$118,863)	(\$62,858)	(\$398,971)
Ecor	nomic purchase component of recovery					
16	S.C. kWh sales % by class	L1/L1T	25.02%	28.69%	46.29%	100.00%
17	Economic purchase accrual	L16 * L17T	(\$98,293)	(\$112,683)	(\$181,828) \$	(392,804)
18	Over / (under) recovery	L9 + L15 + L17	(\$449,122)	(\$384,682)	(\$491,788)	(\$1,325,592)
19	Prior period adjustment	Input				
20	Total over / (under) recovery	L18 + L19	(\$449,122)	(\$384,682)	(\$491,788)	(\$1,325,592)
_	Year 2012-2013					
	Cumulative over / (under) recovery	Cumulative	Residential	Commercial	Industrial	Total Company
ľ		\$48,990,906				
		1	*****	84 805 808	24 050 700	84 405 004
	June	53,476,590	\$1,343,048	\$1,285,908	\$1,856,728	\$4,485,684

Year 2012-2013					
Cumulative over / (under) recovery	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Balance ending May 2012	\$48,990,906				
June	53,476,590	\$1,343,048	\$1,285,908	\$1,856,728	\$4,485,684
July	50,799,022	(823,121)	(726,165)	(1,128,282)	(2,677,568)
August	56,949,138	2,136,571	1,735,521	2,278,024	6,150,116
September	67,674,470	3,255,839	3,109,956	4,359,537	10,725,332
_/2 October	63,234,631	(1,148,653)	(1,291,044)	(2,000,142)	(4,439,839)
November	50,191,517	(3,550,661)	(3,641,800)	(5,850,653)	(13,043,114)
December	45,553,373	(1,546,121)	(1,246,280)	(1,845,743)	(4,638,144)
January	41,535,765	(1,539,143)	(1,092,631)	(1,385,834)	(4,017,608)
February	39,694,364	(726,845)	(492,790)	(621,766)	(1,841,401)
March	33,290,359	(2,235,940)	(1,671,505)	(2,496,560)	(6,404,005)
April	33,494,129	(30,454)	43,706	190,518	203,770
May	\$32,168,537	(\$449,122)	(\$384,682)	(\$491,788)	(\$1,325,592)

Notes

Detail amounts may not recalculate due to percentages presented as rounded.

\_/1 May 2012 ending balance reflects adjustments pursuant to Docket No. 2012-3-E - Order No. 2012-779.

\_/2 Includes a prior period adjustment to offset June and July corrections which have been reflected in the May 2012 ending balance (see footnote \_/1).

- 1	Belews Creek Steam	(H) Buck Gas/CC	Catawba	Cittaide	(H) Dan River Gas/CC	Lee Steam/CT	Lincoln	Marshall Steam	McGuire	Orest CT	Oconee	(H) Riverbend Steam/CT	Rockingham	Current	Total 12 ME May 2013
\$37,435,635				\$26,831,339	•			\$32,900,510				*		\$98,202,677	51,106,687,187
	•	10.680.130		550,336		\$207,633	\$445,172	650,831		\$340,203		(\$643,494)	\$782,571	1,181,462	4 306 48 715 320 22 926 018
\$37,722,052		\$10,680,130		\$27,381,675	\$7,940,568	\$441,307	\$445,172	\$33,551,341		\$340,203		(643,493.75)	\$782,571		163,183,519
383.12				427.40				424.74						412.58	406.04
2,158.06				2,207.97		2,019.19	460.16			456.00		. ,		2,162,31	614.32
395.58		481 95		434.44	481.26	760.73	460.16	433.14		456.02		.	468 78	481.95	400.60
\$37,876,549				\$17,215,330		•		\$16,523,969		# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			01.00		413.370.564
272,142				622,827	,	\$3,284	\$4,846	366,974				(\$504,426)	. 1		97,015
		- 1	\$10,337,586		\$7,940,568	200	71.5		\$11,098,697		\$12,049,465	•	\$782,571	1,801,619 18,620,698 33,485,748	22,926,018 183,183,519 339,007,570
\$38,148,691		\$10,680,130	\$10,337,586	\$17,838,157	\$7,940,568	\$236,958	\$450,017	\$16,890,943	\$11,098,697	\$340,203	\$12,049,465	(\$504,426)	\$782,571		51,735,339,211
385.45				426.93				402.28						399.76	404.71
2,248.92				2,228.68		2,078.58	1,079.19	2,287.72		1				1,380.02	2.214.90
		481.95	61.02		481.26	468.59	460.16		200	456.02	94.60		468.78	478.51	328.43
387.74		481.95	61.02	439.33	481 26	494.84	463.02	409.61	64.28	456.02	61.68		468.78	167.47	58.24
3.54				3.91		(8)		3.85				٠		3.72	3.81
,						20.53	15.14							1,689.80	6.89 INF
		3.49	0.81		3.42	R.e	9.36			5.88	,		5.44	3.46	3.82
3.56	1	3.49	0.61	4.05	3.42	5.87	6.42	3.93	0.64	5.88	0 62		5.44	0.63	1.81
9,826,527				4,032,341				4,107,629				٠		18 200 625	280 E14 275
12.101				27 Q46		. 929	740					٠		200,000	17,743
		2,216,017			1,649,940	47.728	96,743	8		74,602			166,937	386,010	2,110,912 6,980,438
9.838,628		2,218,017	16,942,020	4,060,287	1,649,940	47.886	97.192	4 123 670	17.265.207	74 800	19,536,603		100 000	53,743,830	582,095,157
1,070,193				440.744		(089)		420 200					200	A1 '400'0)	987'599'816
				•		(000)								1,964,042	29,971,219
						4,701	32 6.982			5.781			14 380	48	874
		306,042	1,685,666		232,467				1,727,502		1,938,775			538,509 5,351,943 222,841	5,335,461 57,633,673 1,195,497
1,070,193	F	306,042	1,685,666	440,744	232,467	4,037	7,014	429,309	1,727,502	5,781	1,938,775		14,380	1,468	12.295
\$348,102		\$16,230		\$109,796	\$30,052			•						\$504,181	\$8.553.945
								\$284,643 106,085				. ,		1,551,980	3652,478
	- 1							67,754						400 870	. 204 27.2
\$1,044,329		\$16,230		\$636,657	\$30,052			\$458,482						\$2 29A 934	C20 375, 738

DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED COST REPORT May 2013

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED COMPTION AND INVENTORY REPORT

						May 2013							
Description	Allen	Belews Creek	Buck Buck	Cliffside	(H) Dan River	Lee	Lincoln	Marshall	Mill Creek	(H) Riverbend	Rockinoham	Current	Total 12 ME May 2013
	Steam	Steam	Gas/CC	Steam	Gas/CC	Steam/CT	cı	Steam	CT	Steam/CT	CT		200
Coal Data:											;		
Beginning balance	629,343	1,521,829		383,868		130,167		1,754,538		101,380		4,521,125	5,100,193
Tons received during period	11,333	381,550		260,188				304,628		•		957,699	11,148,249
Inventory adjustments (A)	836	(285)		1,218				(1,031)				739	(5,484)
Tons burned during period (B)	15,485	391,304		175,115				162,729				744,632	11,508,028
Ending balance (C)	626,027	1,511,789		470,160		130,167		1,895,406		101,380		4,734,930	4,734,930
MBTUs per ton burned	21.51	25.11		23.03				25.24		٠		24.58	24.55
Cost of ending inventory (\$non) (C)	99.18	96.81		98.48		86 63		101.28		101.85		99.27	99.27
Biomass/Test Fuel Data:													
Beginning balance						٠						,	2,222
Tons received during period						59							1 150
Inventory adjustments												,	CAI
Tons burned during period						*						,	2.319
Ending balance						4						•	2 '
Cost of ending inventory (\$/ton)												•	į
Fuel Oil Data:													
Beginning balance	83,624	237,168	279,628	129,696	٠	545,253	9,815,132	259,537	3.984.186	45.402	2.968.560	18.348 186	18 513 467
Gallons received during period	44.664	96.947		181.367		74.650	==					307,626	16,210,430
Miscellaneous usage,						200		•	•	•	ŧ	330,785	861,107,CI
transfers and adjustments (D)	(406)	(11,132)	(1)	(14,476)	•	(100)	•	191,761	٠	(45,402)	,	122,057	(493,013)
Gallons burned during period (E)	15,084	88,388		203,345		1,146	3,242	116,875	9	٠	•	429,893	15,343,615
Ending balance	112,798	234,595	279,627	93,242	*	618,657	9,811,890	334,423	3,984,186	•	2,968,560	18,437,978	18,437,978
Cost of ending inventory (\$/gal)	3.01	3.08	2.99	3.05	,	2.87	1.49	3.14	2.99	,	2.47	2.11	2.11
Gas Data: (F)													
Beginning balance													
MCF received during period (G)			2,182,374		1,625,385	47,045	95,423		73,553	•	164,646	4,188,426	51,892,198
MCF burned during period (G)			2,182,374		1,625,385	47,045	95,423		73,553	•	164,646	4,188,426	51,892,198
Ending balance													
Cost of ending inventory (\$/mcf)													
Limestone Data:													
Beginning balance	15,142	36,932		23,701				56,365				132,140	142,267
Tons received during period	•	13,875		13,007				13,876				40,758	504,466
Tons consumed during period (B)	1,190	16,108		12,967				8,971				39,236	513,070
Ending balance	13,952	34,700		23,741				61,270				133,663	133,663
Cost of ending inventory (\$/ton)	37.18	33.74		28.43				31.73				32.23	32,23

<sup>(</sup>A) Coal inventory adjustments include a transfer from Dan River to Belews Creek of 85,903 tons for the twelve months ended. The fons transferred between stations net to zero.

(B) The current month and twelve months ended data include an annual aerial survey adjustment recorded in Dec 2012.

(C) Coal Inventory Ending Balance ackludes 86,033 tons and \$4,173,25a sassociated with terminals for the current month.

(D) Fuel Oil inventory adjustments include a transfer from Dan River to Belews Creek of 87,802 gallons in the current month. The gallons transferred between stations net to zero.

(E) Fuel Oil inventory adjustments include a transfer from Riverbend to Marshall of 210,247 gallons in the current month. The gallons transferred between stations net to zero.

(E) Total gallons of fuel oil burned includes a flat gallons of diesal fuel oil for on-site standby generator consumption is reported as miscellaneous usage, transferred between stations net to zero.

(E) Total gallons of fuel oil burned includes a flat gallons of diesal fuel oil for on-site standby generator consumption is reported as miscellaneous usage, transfers and adjustments.

(E) Gas is burned as received; therefore, inventory balances are not maintained.

(G) Twelve months ended Gas MCF received and burned includes \$5,015,580 attributable to corribined cycle plant activity.

(H) The following CT units were retired October 1, 2012: Buck units 7, 8, 8, 9, Dan River units 8, 9, 10, 8, 11; and Buzzard Roost units 6, 7, 8, 9, 10, 11, 12, 13, 14, 8, 15.

Detail amounts may not add to totals shown due to rounding.

#### DUKE ENERGY CAROLINAS ANALYSIS OF COAL PURCHASES May 2013

STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ALLEN	SPOT		•	-
	CONTRACT	11,333	\$ 1,035,193.12	\$ 91.34
	ADJUSTMENTS TOTAL	11,333	1,035,193.12	91.34
BELEWS CREEK	SPOT	(21,597)	(1,317,429.20)	61.00
	CONTRACT	403,147	36,564,477,77	90.70
	ADJUSTMENTS		2,188,586.38	-
	TOTAL	381,550	37,435,634.95	98.11
CLIFFSIDE	SPOT	-	-	-
	CONTRACT	260,188	26,566,999.20	102.11
	ADJUSTMENTS	•	264,339.43	•
	TOTAL	260,188	26,831,338.63	103.12
MARSHALL	SPOT	-	-	-
	CONTRACT	304,628	31,345,062.71	102.90
	ADJUSTMENTS	· -	1,555,447.21	-
	TOTAL	304,628	32,900,509.92	108.00
ALL PLANTS	SPOT	(21,597)	(1,317,429.20)	61.00
	CONTRACT	979,296	95,511,732.80	97.53
	ADJUSTMENTS TOTAL	957,699	4,008,373.02 \$ 98,202,676.62	\$ 102.54

#### Duke Energy Carolinas Analysis of Quality of Coal Received May 2013

Station	Percent Moisture	Percent Ash	Heat Value	Percent Sulfur
Allen	7.61	14.91	11,281	0.77
Belews Creek	6.70	10.03	12,479	1.21
Cliffside	9.13	9.72	12,064	2.12
Marshall	7.21	8.57	12,714	2.15

#### Duke Energy Carolinas Analysis of Cost of Oil Purchases May 2013

Station	Allen	Belews Creek	Cliffside	Lee
Vendor	HighTowers	HighTowers	HighTowers	HighTowers
Spot / Contract	Contract	Contract	Contract	Contract
Sulfur Content %	0	0	0	0
Gallons Received	44,664	96,947	181,367	74,650
Total Delivered Cost	\$ 129,737.94	\$ 286,417.23	\$ 550,335.93	\$ 207,633.44
Delivered Cost/Gal	\$ 2.90	\$ 2.95	\$ 3.03	\$ 2.78
BTU/Gallon	137,900	136,903	137,430	137,743

## DUKE ENERGY CAROLINAS POWER PLANT PERFORMANCE DATA TWELVE MONTHS SUMMARY

Exhibit A Schedule 10 Page 1 of 7

June, 2012 - May, 2013

Plant Name	Generation MWH	Capacity Rating MW	Capacity Factor %	Net Equivalent Availability %
Oconee	21,700,478	2,538	97.61	95.76
McGuire	16,662,667	2,224	85.52	82.89
Catawba	19,270,528	2,258	97.42	94.92

Exhibit A Schedule 10 Page 2 of 7

#### **Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary** June, 2012 through May, 2013

#### **Baseload Steam Units**

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	7,486,368	1,110	76.99%	90.60%
Belews Creek 2	6,198,017	1,110	63.74%	88.23%
Cliffside 6	2,072,487	825	69.34%	78.85%
Marshall 3	2,962,100	658	51.39%	70.33%
Marshali 4	3,739,402	660	64.68%	83.77%

Note: This report is limited to capturing data beginning the first full month a unit is in commercial operation.

Cliffside unit 6 net generation (mWh) within the 12 month period was as follows:

June 2012:

1,496 mWh; pre-commercial

July 2012:

77,787 mWh; pre-commercial

August 2012:

212,376 mWh; pre-commercial

September 2012: 139,874 mWh; pre-commercial

October 2012:

(1,302) mWh; pre-commercial (auxiliaries only)

November 2012: 170,464 mWh; pre-commercial

December 2012:

168,280 mWh; pre-commercial & commercial combined

Exhibit A Schedule 10 Page 3 of 7

#### Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary June, 2012 through May, 2013

#### **Intermediate Steam Units**

Unit Name	Net Generation	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 5	(mWh) 1,467,118	555	30.19%	94.22%
Marshall 1	1,204,673	380	36.19%	88.10%
Marshall 2	1,391,160	380	41.79%	88.21%

#### Duke Energy Carolinas Power Plant Performance Data

## Twelve Month Summary June, 2012 through May, 2013 Other Cycling Coal Units

Exhibit A Schedule 10 Page 4 of 7

Unit Name	Net Generation (m Wh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen I	100,352	162	7.07%	91.05%
Allen 2	77,862	162	5.49%	91.03%
Allen 3	592,859	261	25.93%	90.51%
Allen 4	739,433	276	30.58%	94.81%
Allen 5	538,672	266	23.12%	87.41%
Buck 5	198,115	128	21.21%	97.97%
Buck 6	81,237	128	8.70%	98.79%
Lee 1	10,717	100	1.22%	99.93%
Lec 2	20,702	100	2.36%	97.95%
Lee 3	61,448	170	4.13%	99.24%
Riverbend 4	21,749	94	3.17%	99.69%
Riverbend 5	19,720	94	2.88%	99.48%
Riverbend 6	109,255	133	11.26%	98.38%
Riverbend 7	110,206	133	11.36%	98.10%

### Duke Energy Carolinas Power Plant Performance Data

### Twelve Month Summary June, 2012 through May, 2013

#### **Combustion Turbines**

**Net Generation** Capacity Operating Rating (mW) Availability (%) (mWh) **Station Name** 66.67% -79 21 **Buck CT** 100 89.99% -354 **Buzzard Roost CT** 28 71.96% Dan River CT -28 97.25% 82 Lee CT 52,334 18,634 1,264 94.83% Lincoln CT 65,022 592 93.27% Mill Creek CT -305 37 100.00% Riverbend CT 825 51.42% Rockingham CT 465,067

#### Notes:

The following units were retired October 1, 2012:

Buck CT units 7, 8, & 9
Buzzard Roost CT units 6, 7, 8, 9, 10, 11, 12, 13, 14, & 15.
Dan River CT units 4, 5, & 6
Riverbend CT units 8, 9, 10, & 11.

The following units were retired April 1, 2013:

Buck CT units 5 & 6 Riverbend CT units 4, 5, 6, & 7. Exhibit A Schedule 10 Page 5 of 7

Exhibit A Schedule 10 Page 6 of 7

#### Duke Energy Carolinas Power Plant Performance 12 Months Ended May 2013

		Capacity	
	Generation	Rating	Operating
Name of Plant	(MWH)	(MW)	Availability (%)
Conventional Hydro Plants:			
Bridgewater	67,625	31.500	98.68
Cedar Creek	127,683	45.000	98.50
Cowans Ford	160,145	325.200	84.14
Dearborn	144,626	42.000	88.09
Fishing Creek	129,417	49.000	97.05
Gaston Shoals	16,953	2.000	45.02
Great Falls	7,772	12.000	89.36
Keowee	48,691	152.000	98.69
Lookout Shoals	86,044	27.900	68.15
Mountain Island	106,807	62.000	95.00
Ninety Nine Island	60,697	6.400	97.38
Oxford	104,095	40.000	66.55
Rhodhiss	65,042	30.000	75.55
Rocky Creek	(215)	-	0.27
Tuxedo	24,744	6.400	93.44
Wateree	187,748	85.000	92.03
Wylie	125,795	72.000	97.39
Nantahala	233,944	50.000	96.37
Queens Creek	3,920	1.440	94.51
Thorpe	74,478	19.700	84.41
Tuckasegee	6,528	2.500	88.88
Tennessee Creek	14,781	9.800	84.81
Bear Creek	29,947	9.450	99.96
Cedar Cliff	21,158	6.400	93.26
Mission	120	0.600	72.99
Franklin	3,368	0.600	79.82
Bryson	504	0.480	99.81
Total Conventional	1,852,416		
Pumped Storage Plants:			
Jocasee	976,876	780.000	92.84
Bad Creek	1,698,010	1,360.000	92.82
Subtotal	2,674,886	1,300.000	32.02
Subiolai	2,074,000		
Energy for Pumping:			
Jocasee	(1,182,634)		
Bad Creek	(2,149,171)		
Subtotal	(3,331,805)		
Generation less Energy for Pumping			
Jocassee	(205,758)		
Bad Creek	(451,161)		
Total Pumped Storage	(656,919)		

#### NOTE:

Capacity MW amounts varied across the range of time indicated.

The amounts shown represent the capacity effective as of the period end date.

#### Duke Energy Carolinas Power Plant Performance Data

#### Twelve Month Summary June, 2012 through May, 2013 Combined Cycle Units

Exhibit A Schedule 10 Page 7 of 7

Unit Name	Net Generation (m Wh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Buck CC 10	4,440,359	620	81.76%	93.06%
Dan River CC 7	1,643,450	620	73.16%	91.31%

Note: This report is limited to capturing data beginning the first full month a station is in commercial operation.

Dan River CC net generation (mWh) within the twelve month period was as follows:

July 2012:

935 mWh; pre-commercial

August 2012:

3,526 mWh; pre-commercial

September 2012:

2,209 mWh; pre-commercial 8,488 mWh; pre-commercial

October 2012: November 2012:

104,254 mWh; pre-commercial

December 2012:

1,986 mWh; pre-commercial

December 2012:

135,081 mWh; commercial

61,143 25.65% 1,366,905 1,326,365 1,528,598 222,147 360,312 740,611 196,912 14,167 34,404 1,563,554 5,102,221 7,220,737 1,323,636 1,755,178 79,232 5,432,459 199,582 1,755,178 6,088 5,102,221 SC Retail portion SC Retail portion SC Retail portion **DE Carolinas** DE Carolinas **DE Carolinas** 12,496,900 12,004,696 3,551,559 3,734,453 754,711 4,328,454 152,128 37,005,125 152,128 1,493,125 394,421 138,034 28,232 69,022 3,533,784 730,762 3,314,215 538,388 4,328,454 36,386,341 12,496,900 12,004,696 DE Progress DE Progress DE Progress Allocated Savings Allocated Savings Allocated Savings 2,887,675 767,770 308,929 55,239 134,142 23,737 879,482 7,088,829 243,366 68,488,765 20,417,977 21,539,628 28,487,023 6,085,961 5,286,126 792,218 6,096,369 20,417,977 5,454,885 7,088,829 243,366 60,833,373 1,404,875 5,582,368 5,296,469 DE Carolinas **DE Carolinas** DE Carolinas 1,634,193 32,914,877 33,544,324 9,006,444 8,610,685 1,330,606 11,417,283 395,494 97,219,714 4,380,800 1,162,191 446,963 83,471 203,164 35,954 8,448,180 8,819,910 100.00% 32,914,877 40,491,719 9,820,414 Combined Combined Combined \$ 5,199,590 3,576,687 864,558 512,190 (207,312) 22,491 648,235 16,725,110 34.22% 16,725,110 26,365,945 3,357,119 5,016,697 25,747,161 1,237,429 1,564,798 **Gross Savings Gross Savings** DE Progress **Gross Savings** DE Progress DE Progress 16,189,767 33,544,324 3,989,747 11,417,283 40,491,719 4,620,824 5,243,223 769,635 11,417,283 898,208 4,380,800 650,001 654,275 60,980 203,164 395,494 79,127,945 65.78% 682,371 16,189,767 5,253,566 71,472,553 6,883,382 DE Carolinas **DE Carolinas DE Carolinas** 45,950,000 30,395,000 12,800,000 16,900,000 2,000,000 \$ 318,955,000 259,800,000 Target May 2013 May 2013 Reagent Procurement & Transportation Reagent Procurement & Transportation Reagent Procurement & Transportation Coal Transportation (b) Coal Transportation (a) Coal Blending (b) Coal Procurement (b) Coal Blending (a) Coal Procurement (a) Natural Gas Capacity Natural Gas Trading Natural Gas Capacity Natural Gas Trading Twelve Months Ending: Natural Gas Capacity Natural Gas Trading Coal Transportation Coal Procurement Billed Sales (MWH) Joint Dispatch Joint Dispatch Resource ratio % Sales allocation % Joint Dispatch Coal Blending Total-to-date: 126437 1 7 8 4 3 7 7

May 2013

**Duke Energy Carolinas** Dollars reported in (\$)

Month Ending:

(a) Includes June 2012 savings associated with fuel-related savings guarantee, retained by the originating company. (b) Includes January – June 2012 savings associated with fuel-related savings guarantee, retained by the originating company. Note: Detail amounts may not add to totals shown due to rounding.

#### Smith Rebuttal Exhibit A

Exhibit B Page 1 of 23

	PERIOD: May, 2013	D REMEDIAL ACTION TAKEN							
AS CE REVIEW PLAN		REASON OUTAGE OCCURRED							
BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN		CAUSE OF OUTAGE							
E LOAD POWEI		SCHEDULED / UNSCHEDULED							
BASI		DATE OF DURATION SCHEDULED / OUTAGE OF OUTAGE UNSCHEDULED							
		DATE OF OUTAGE	None	None	None	None	None	None	None
		UNIT	1	6	æ	ч	71	-	7
		PLANT	Oconee			McGuire		Catawba	

Exhibit B Page 2 of 23

#### Duke Energy Carolinas Base Load Power Plant Performance Review Plan

#### May 2013

#### **Belews Creek Station**

No Outages During The Month.

#### **Cliffside Station**

Unit	<b>Duration of Outage</b>	Type of	Cause	of Outage	Reason Outage Occurred	Remedial Action
CS06	4/30/2013 3:03:00 AM To 5/3/2013 10:00:00 AM	Outage Unsch	0790	Pipe Hangers (General)	FOUND DAMAGE TO ECONOMIZER INLET LINE HANGER ON 7TH FLOOR. EVALUATING DAMAGE	Taken
Unit	<b>Duration of Outage</b>	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
CS06	5/3/2013 10:00:00 AM To 5/3/2013 8:35:00 PM	Sch	0680	Feedwater Valves (not Feedwater Regulating Valve)	FEEDWATER VALVE REPAIR	
			Mai	rshall Station		
Unit	<b>Duration of Outage</b>	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken
MS03	3/1/2013 6:51:00 PM To 6/1/2013	Sch	4400	Major Turbine Overhaul (720 Hours Or Longer)	Turbine/Boiler Planned Outage.	
Unit	<b>Duration of Outage</b>	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken
MS04	3/29/2013 6:04:00 PM To 5/16/2013 8:44:00 PM	Sch	4212	Lp Turbine Buckets Or Blades	Low Pressure Turbine Blade Inspection/Replacement.	
		]	Buck (	Combined Cycle		
Unit	<b>Duration of Outage</b>	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken
BK 10	4/26/2013 12:01:00 AM To 5/6/2013 5:50:00 AM	Sch	5083	Gas Turbine - High Pressure Nozzles/vanes	GT11 & GT12 - Boroscope inspection of nozzles and vanes.	

Exhibit B Page 3 of 23

## May 2013 Dan River Combined Cycle

Unit	<b>Duration of Outage</b>	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken
DR 07	5/5/2013 9:07:00 PM To 5/10/2013 5:00:00 PM	Unsch	4264	Turbine Combined Intercept Valves	PLANT - ST 07 #1 IV failed daily valve test unit removed from operation per GE rec.	
Unit	<b>Duration of Outage</b>	Type of Outage	Cause of	of Outage	Reason Outage Occurred	Remedial Action Taken
DR 07	5/27/2013 12:00:00 PM To 5/27/2013 8:33:00 PM	Unsch	3330	Condensate Valves	PLANT - Condensate system relief valve lifting prematurely.	

Exhibit B Page 4 of 23

#### **Duke Energy Carolinas** BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN

#### May 2013 **Oconee Nuclear Station**

	Unit	1	Unit	2	Unit	3	
(A) MDC (MW)	846		846		846		
(B) Period Hours	744		744		744		
(C1) Net Gen (MWH) and Capacity Factor	641971	101.99	644704	102.43	652100	103.60	
(D1) Net MWH Not Gen Due To Full Schedule Outages	0	0.00	0	0.00	0	0.00	
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	0	0.00	0	0.00	92	0.01	
(E1) Net MWH Not Gen Due To Full Forced Outages	0	0.00	0	0.00	0	0.00	
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-12547	-1.99	-15280	-2.43	-22768	-3.61	
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00	0	0.00	
* (G) Core Conservation	0	0.00	0	0.00	0	0.00	
(H) Net MWH Possible In Period	629424	100.00%	629424	100.00%	629424	100.00%	
(I) Equivalent Availability		100.00		100.00		99.99	
(J) Output Factor		101.99		102.43		103.60	
(K) Heat Rate		10,142		10,099		9,991	

\* Estimate FOOTNOTE: D1 and E1 Include Ramping Losses

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#### **Duke Energy Carolinas** BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN

#### 2013 May **McGuire Nuclear Station**

	Unit	1	Unit	2
(A) MDC (MW)	1129		1129	
(B) Period Hours	744		744	
(C1) Net Gen (MWH) and Capacity Factor	866187	103.12	861315	102.54
(D1) Net MWH Not Gen Due To Full Schedule Outages	0	0.00	0	0.00
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	0	0.00	3835	0.46
(E1) Net MWH Not Gen Due To Full Forced Outages	0	0.00	0	0.00
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-26211	-3.12	-25174	-3.00
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00
* (G) Core Conservation	0	0.00	0	0.00
(H) Net MWH Possible In Period	839976	100.00%	839976	100.00%
(I) Equivalent Availability		100.00		99.54
(J) Output Factor		103.12		102.54
(K) Heat Rate		9,989		9,999

\* Estimate FOOTNOTE: D1 and E1 Include Ramping Losses

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#### **Duke Energy Carolinas** BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN

#### 2013 May **Catawba Nuclear Station**

Catawba Nuclear Station					
	Unit	1	Unit	<u> 2</u>	
(A) MDC (MW)	1129		1129		
(B) Period Hours	744		744		
(C1) Net Gen (MWH) and Capacity Factor	860126	102.40	825540	98.28	
(D1) Net MWH Not Gen Due To Full Schedule Outages	0	0.00	0	0.00	
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	187	0.02	35561	4.23	
(E1) Net MWH Not Gen Due To Full Forced Outages	0	0.00	0	0.00	
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-20337	-2.42	-21125	-2.51	
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00	
* (G) Core Conservation	0	0.00	0	0.00	
(H) Net MWH Possible In Period	839976	100.00%	839976	100.00%	
(I) Equivalent Availability		99.98		95.77	
(J) Output Factor		102.40		98.28	
(K) Heat Rate		10,044		10,057	

\* Estimate FOOTNOTE: D1 and E1 Include Ramping Losses

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## May 2013 Belews Creek Station

	Belews Creek 1	Belews Creek 2
(A) MDC (mw)	1,110	1,110
(B) Period Hrs	744	744
(C1) Net Generation (mWh)	380,497	689,696
(C1) Capacity Factor	46.07	83.51
(D1) Net mWh Not Generated due to Full Scheduled Outages	0	0
(D1) Scheduled Outages: percent of Period Hrs	0.00	0.00
(D2) Net mWh Not Generated due to Partial Scheduled Outages	1,355	0
(D2) Scheduled Derates: percent of Period Hrs	0.16	0.00
(E1) Net mWh Not Generated due to Full Forced Outages	0	0
(E1) Forced Outages: percent of Period Hrs	0.00	0.00
(E2) Net mWh Not Generated due to Partial Forced Outages	1,432	0
(E2) Forced Derates: percent of Period Hrs	0.17	0.00
(F) Net mWh Not Generated due to Economic Dispatch	442,557	136,144
(F) Economic Dispatch: percent of Period Hrs	53.59	16.49
(G) Net mWh Possible in Period	825,840	825,840
(H) Equivalent Availability	99.66	100.00
(I) Output Factor (%)	85.95	83.51
(J) Heat Rate (BTU/NkWh)	9,394	9,083

\*Estimated

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## May 2013 Buck Combined Cycle

Buck CC 10

(A) MDC (mw)	620
(B) Period Hrs	744
(C1) Net Generation (mWh)	306,042
(C1) Capacity Factor	66.35
(D1) Net mWh Not Generated due to Full Scheduled Outages	78,017
(D1) Scheduled Outages: percent of Period Hrs	16.91
(D2) Net mWh Not Generated due to Partial Scheduled Outages	19,003
(D2) Scheduled Derates: percent of Period Hrs	0.00
(E1) Net mWh Not Generated due to Full Forced Outages	0
(E1) Forced Outages: percent of Period Hrs	0.00
(E2) Net mWh Not Generated due to Partial Forced Outages	0
(E2) Forced Derates: percent of Period Hrs	0.00
(F) Net mWh Not Generated due to Economic Dispatch	58,218
(F) Economic Dispatch: percent of Period Hrs	12.62
(G) Net mWh Possible in Period	461,280
(H) Equivalent Availability	78.97
(I) Output Factor (%)	79.85
(J) Heat Rate (BTU/NkWh)	6,833

\*Estimated

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#### May 2013 Cliffside Station

Cliffside 6

(A) MDC (mw)	825
(B) Period Hrs	744
(C1) Net Generation (mWh)	425,751
(C1) Capacity Factor	69.36
(D1) Net mWh Not Generated due to Full Scheduled Outages	8,731
(D1) Scheduled Outages: percent of Period Hrs	1.42
(D2) Net mWh Not Generated due to Partial Scheduled Outages	0
(D2) Scheduled Derates: percent of Period Hrs	0.00
(E1) Net mWh Not Generated due to Full Forced Outages	47,850
(E1) Forced Outages: percent of Period Hrs	7.80
(E2) Net mWh Not Generated due to Partial Forced Outages	0
(E2) Forced Derates: percent of Period Hrs	0.00
(F) Net mWh Not Generated due to Economic Dispatch	131,468
(F) Economic Dispatch: percent of Period Hrs	21.42
(G) Net mWh Possible in Period	613,800
(H) Equivalent Availability	90.78
(I) Output Factor (%)	84.01
(J) Heat Rate (BTU/NkWh)	9,052

\*Estimated

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## May 2013 Dan River Combined Cycle

Dan River CC 7

(A) MDC (mw)	620
(B) Period Hrs	744
(C1) Net Generation (mWh)	232,467
(C1) Capacity Factor	50.40
(D1) Net mWh Not Generated due to Full Scheduled Outages	0
(D1) Scheduled Outages: percent of Period Hrs	0.00
(D2) Net mWh Not Generated due to Partial Scheduled Outages	13,425
(D2) Scheduled Derates: percent of Period Hrs	2.91
(E1) Net mWh Not Generated due to Full Forced Outages	77,149
(E1) Forced Outages: percent of Period Hrs	16.72
(E2) Net mWh Not Generated due to Partial Forced Outages	972
(E2) Forced Derates: percent of Period Hrs	0.21
(F) Net mWh Not Generated due to Economic Dispatch	137,267
(F) Economic Dispatch: percent of Period Hrs	29.76
(G) Net mWh Possible in Period	461,280
(H) Equivalent Availability	80.15
(I) Output Factor (%)	76.48
(J) Heat Rate (BTU/NkWh)	7,061

\*Estimated

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#### May 2013 Marshall Station

	Marshall 3	Marshall 4
(A) MDC (mw)	658	660
(B) Period Hrs	744	744
(C1) Net Generation (mWh)	-1,127	168,314
(C1) Capacity Factor	0.00	34.28
(D1) Net mWh Not Generated due to Full Scheduled Outages	489,552	251,284
(D1) Scheduled Outages: percent of Period Hrs	100.00	51.17
(D2) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(D2) Scheduled Derates: percent of Period Hrs	0.00	0.00
(E1) Net mWh Not Generated due to Full Forced Outages	0	0
(E1) Forced Outages: percent of Period Hrs	0.00	0.00
(E2) Net mWh Not Generated due to Partial Forced Outages	0	1,011
(E2) Forced Derates: percent of Period Hrs	0.00	0.21
(F) Net mWh Not Generated due to Economic Dispatch	1,127	70,431
(F) Economic Dispatch: percent of Period Hrs	0.23	14.34
(G) Net mWh Possible in Period	489,552	491,040
(H) Equivalent Availability	0.00	48.62
(I) Output Factor (%)	0.00	70.20
(J) Heat Rate (BTU/NkWh)	0	9,626

#### Duke Energy Carolinas Intermediate Power Plant Performance Review Plan

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#### May 2013 Cliffside Steam Station

	Cliffside 5
(A) MDC (mWh)	556
(B) Period Hrs	744
(C1) Net Generation (mWh)	14,993
(D) Net mWh Possible in Period	413,664
(E) Equivalent Availability	94.82
(F) Output Factor (%)	55.56
(G) Capacity Factor	3.62

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#### **Duke Energy Carolinas** BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN

#### June 2012 - May 2013 **Oconee Nuclear Station**

		O COLLECT 10	icicui static	/11			
	Unit	1	Unit	2	Unit 3		
(A) MDC (MW)	846		846		846		
(B) Period Hours	8760		8760		8760		
(C1) Net Gen (MWH) and Capacity Factor	6686327	90.22	7543922	101.79	7470229	100.80	
(D1) Net MWH Not Gen Due To Full Schedule Outages	589282	7.95	0	0.00	134624	1.82	
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	18223	0.25	1588	0.02	4047	0.05	
(E1) Net MWH Not Gen Due To Full Forced Outages	155672	2.10	0	0.00	0	0.00	
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-38544	-0.52	-134550	-1.81	-197940	-2.67	
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00	0	0.00	
* (G) Core Conservation	0	0.00	0	0.00	0	0.00	
(H) Net MWH Possible In Period	7410960	100.00%	7410960	100.00%	7410960	100.00%	
(I) Equivalent Availability		89.25		99.98		98.04	
(J) Output Factor		100.30		101.79		102.66	
(K) Heat Rate		10,244		10,160		10,003	

\* Estimate FOOTNOTE: D1 and E1 Include Ramping Losses

#### Smith Rebuttal Exhibit A

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#### **Duke Energy Carolinas** BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN

#### June 2012 - May 2013 **McGuire Nuclear Station**

	<u>Unit</u>	1	Unit	<u> 2</u>
(A) MDC (MW)	1129		1129	
(B) Period Hours	8760		8760	
(C1) Net Gen (MWH) and Capacity Factor	8817120	90.51	7845547	80.53
(D1) Net MWH Not Gen Due To Full Schedule Outages	975456	10.01	1003200	10.30
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	46476	0.48	71188	0.73
(E1) Net MWH Not Gen Due To Full Forced Outages	123818	1.27	1042690	10.70
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-221803	-2.27	-221558	-2.26
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00
* (G) Core Conservation	0	0.00	0	0.00
(H) Net MWH Possible In Period	9741067	100.00%	9741067	100.00%
(I) Equivalent Availability		87.79		77.99
(J) Output Factor		101.83		102.24
(K) Heat Rate		10,135		10,095

#### Smith Rebuttal Exhibit A

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#### **Duke Energy Carolinas** BASE LOAD POWER PLANT PERFORMANCE REVIEW PLAN

June 2012 - May 2013 Catawba Nuclear Station

	Unit	1	Unit	2	
(A) MDC (MW)	1129		1129		
(B) Period Hours	8760		8760		
(C1) Net Gen (MWH) and Capacity Factor	9131298	92.33	10139230	102.52	
(D1) Net MWH Not Gen Due To Full Schedule Outages	708673	7.17	0	0.00	
* (D2) Net MWH Not Gen Due To Partial Scheduled Outages	27605	0.28	36913	0.37	
(E1) Net MWH Not Gen Due To Full Forced Outages	220855	2.23	0	0.00	
* (E2) Net MWH Not Gen Due To Partial Forced Outages	-198391	-2.01	-286103	-2.89	
* (F) Net MWH Not Gen Due To Economic Dispatch	0	0.00	0	0.00	
* (G) Core Conservation	0	0.00	0	0.00	
(H) Net MWH Possible In Period	9890040	100.00%	9890040	100.00%	
(I) Equivalent Availability		90.22		99.63	
(J) Output Factor		101.91		102.52	
(K) Heat Rate		10,054		9,997	

\* Estimate FOOTNOTE: D1 and E1 Include Ramping Losses

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#### June, 2012 through May, 2013 Belews Creek Station

	Belews Creek 1	Belews Creek 2
(A) MDC (mw)	1,110	1,110
(B) Period Hrs	8,760	8,760
(C1) Net Generation (mWh)	7,486,368	6,198,017
(C1) Capacity Factor	76.99%	63.74%
(D1) Net mWh Not Generated due to Full Scheduled Outages	528,915	953,083
(D1) Scheduled Outages: percent of Period Hrs	5.44%	9.80%
(D2) Net mWh Not Generated due to Partial Scheduled Outages	86,191	45,535
(D2) Scheduled Derates: percent of Period Hrs	0.77%	0.46%
(E1) Net mWh Not Generated due to Full Forced Outages	277,574	36,741
(E1) Forced Outages: percent of Period Hrs	2.85%	0.38%
(E2) Net mWh Not Generated due to Partial Forced Outages	20,993	109,209
(E2) Forced Derates: percent of Period Hrs	0.22%	1.12%
(F) Net mWh Not Generated due to Economic Dispatch	1,323,559	2,381,015
(F) Economic Dispatch: percent of Period Hrs	13.61%	24.49%
(G) Net mWh Possible in Period	9,723,600	9,723,600
(H) Equivalent Availability	90.60	88.23
(I) Output Factor (%)	88.49%	82.81%
(J) Heat Rate (BTU/NkWh)	9,097	9,269

\*Estimated

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#### June, 2012 through May, 2013 Buck Combined Cycle

Buck CC 10

(A) MDC (mw)	620
(B) Period Hrs	8,760
(C1) Net Generation (mWh)	4,440,359
(C1) Capacity Factor	81.76%
(D1) Net mWh Not Generated due to Full Scheduled Outages	338,127
(D1) Scheduled Outages: percent of Period Hrs	6.23%
(D2) Net mWh Not Generated due to Partial Scheduled Outages	43,312
(D2) Scheduled Derates: percent of Period Hrs	0.00%
(E1) Net mWh Not Generated due to Full Forced Outages	38,636
(E1) Forced Outages: percent of Period Hrs	0.71%
(E2) Net mWh Not Generated due to Partial Forced Outages	50,221
(E2) Forced Derates: percent of Period Hrs	0.92%
(F) Net mWh Not Generated due to Economic Dispatch	520,544
(F) Economic Dispatch: percent of Period Hrs	9.58%
(G) Net mWh Possible in Period	5,431,200
(H) Equivalent Availability	91.34
(I) Output Factor (%)	88.14%
(J) Heat Rate (BTU/NkWh)	7,060

\*Estimated

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#### June, 2012 through May, 2013 Cliffside Station

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C	IIII	siue	; (

(A) MDC (mw)	825	Note: This report is limited to capturing
(B) Period Hrs	3,623	data beginning the first full month a unit is in commercial operation.
(C1) Net Generation (mWh)	2,072,487	·
(C1) Capacity Factor	69.34%	Cliffside unit 6 net generation (mWh) within
(D1) Net mWh Not Generated due to Full Scheduled Outages	172,879	the 12 month period was as follows:
(D1) Scheduled Outages: percent of Period Hrs	5.78%	June 2012: 1,496 mWh; pre-
(D2) Net mWh Not Generated due to Partial Scheduled Outages	0	commercial July 2012: 77,787 mWh; pre-
(D2) Scheduled Derates: percent of Period Hrs	0.00%	commercial
(E1) Net mWh Not Generated due to Full Forced Outages	326,466	Aug 2012: 212,376 mWh; pre- commercial
(E1) Forced Outages: percent of Period Hrs	10.92%	Sept 2012: 139,874 mWh; pre- commercial
(E2) Net mWh Not Generated due to Partial Forced Outages	132,679	Oct 2012: (1,302) mWh; pre-
(E2) Forced Derates: percent of Period Hrs	4.44%	commercial (auxiliaries only) Nov 2012: 170,464 mWh; pre-
(F) Net mWh Not Generated due to Economic Dispatch	284,464	commercial Dec 2012: 168,280 mWh; pre-
(F) Economic Dispatch: percent of Period Hrs	9.52%	100,200 mwm, pre-
(G) Net mWh Possible in Period	2,988,975	
(H) Equivalent Availability	78.85	
(I) Output Factor (%)	86.45%	
(J) Heat Rate (BTU/NkWh)	8,836	

\*Estimated

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## June, 2012 through May, 2013 Dan River Combined Cycle

Dan River CC 7

(A) MDC (mw)	620	Note: This report is limited to capturing data		
(B) Period Hrs	3,623	beginning the first full month a station is in commercial operation.		
(C1) Net Generation (mWh)	1,643,450	Dan River CC net generation (mWh) within the		
(C1) Capacity Factor	73.16%	twelve month period was as follows:		
(D1) Net mWh Not Generated due to Full Scheduled Outages	111,032	July 2012: 935 mWh; pre-commercial		
(D1) Scheduled Outages: percent of Period Hrs	4.94%	Aug 2012: 3,526 mWh; pre-commercial Sept 2012: 2,209 mWh; pre-commercial		
(D2) Net mWh Not Generated due to Partial Scheduled Outages	13,624	Oct 2012: 8,488 mWh; pre-commercial Nov 2012: 104,254 mWh; pre-commercial		
(D2) Scheduled Derates: percent of Period Hrs	0.61%	Dec 2012: 1,986 mWh; pre-commercial Dec 2012: 135,081 mWh; commercial		
(E1) Net mWh Not Generated due to Full Forced Outages	84,155	•		
(E1) Forced Outages: percent of Period Hrs	3.75%			
(E2) Net mWh Not Generated due to Partial Forced Outages	11,041			
(E2) Forced Derates: percent of Period Hrs	0.49%			
(F) Net mWh Not Generated due to Economic Dispatch	382,959			
(F) Economic Dispatch: percent of Period Hrs	17.05%			
(G) Net mWh Possible in Period	2,246,260			
(H) Equivalent Availability	90.21			
(I) Output Factor (%)	85.27%			
(J) Heat Rate (BTU/NkWh)	7,080			

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#### June, 2012 through May, 2013 Marshall Station

	Marshall 3	Marshall 4
(A) MDC (mw)	658	660
(B) Period Hrs	8,760	8,760
(C1) Net Generation (mWh)	2,962,100	3,739,402
(C1) Capacity Factor	51.39%	64.68%
(D1) Net mWh Not Generated due to Full Scheduled Outages	1,647,522	762,080
(D1) Scheduled Outages: percent of Period Hrs	28.58%	13.18%
(D2) Net mWh Not Generated due to Partial Scheduled Outages	6,043	14,072
(D2) Scheduled Derates: percent of Period Hrs	0.10%	0.24%
(E1) Net mWh Not Generated due to Full Forced Outages	0	133,980
(E1) Forced Outages: percent of Period Hrs	0.00%	2.32%
(E2) Net mWh Not Generated due to Partial Forced Outages	56,497	28,115
(E2) Forced Derates: percent of Period Hrs	0.98%	0.49%
(F) Net mWh Not Generated due to Economic Dispatch	1,091,918	1,103,951
(F) Economic Dispatch: percent of Period Hrs	18.94%	19.09%
(G) Net mWh Possible in Period	5,764,080	5,781,600
(H) Equivalent Availability	70.33	83.77
(I) Output Factor (%)	75.20%	76.54%
(J) Heat Rate (BTU/NkWh)	9,581	9,431

\*Estimated

#### Duke Energy Carolinas Intermediate Power Plant Performance Review Plan

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#### June 2012 through May 2013 Cliffside Station

#### Cliffside 5

<b>(A)</b>	MDC (mWh)	555
<b>(B)</b>	Period Hrs	8,760
(C1)	Net Generation (mWh)	1,467,118
<b>(D)</b>	Net mWh Possible in Period	4,858,848
<b>(E)</b>	<b>Equivalent Availability</b>	94.22
<b>(F)</b>	Output Factor (%)	74.17%
<b>(G)</b>	<b>Capacity Factor</b>	30.19%

#### Smith Rebuttal Exhibit A

**DUKE ENERGY CAROLINAS** Outages for 100MW or Larger Units May 2013

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Full Outage Hours								
<u>Unit</u> <u>MW</u> <u>Scheduled</u> <u>Unscheduled</u> <u>Total</u>								
Oconee	1	846	0.00	0.00	0.00			
	2	846	0.00	0.00	0.00			
	3	846	0.00	0.00	0.00			
McGuire	1	1129	0.00	0.00	0.00			
	2	1129	0.00	0.00	0.00			
Catawba	1	1129	0.00	0.00	0.00			
	2	1129	0.00	0.00	0.00			

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# Duke Energy Carolinas Outages for 100 mW or Larger Units May 2013

	Capacity	Full Ou	Total Outage	
<b>Unit Name</b>	Rating (mW)	Scheduled	Unscheduled	Hours
Allen 1	162	0.00	0.00	0.00
Allen 2	162	0.00	0.00	0.00
Allen 3	261	24.00	0.00	24.00
Allen 4	276	0.00	0.00	0.00
Allen 5	266	0.00	0.00	0.00
Belews Creek 1	1,110	0.00	0.00	0.00
Belews Creek 2	1,110	0.00	0.00	0.00
Buck CC 10	620	125.83	0.00	125.83
Cliffside 5	556	34.03	4.42	38.45
Cliffside 6	825	10.58	58.00	68.58
Dan River CC 7	620	0.00	124.43	124.43
Lee 1	100	0.00	0.00	0.00
Lee 2	100	0.00	0.00	0.00
Lee 3	170	0.00	0.00	0.00
Marshall 1	380	53.40	3.93	57.33
Marshall 2	380	145.65	0.00	145.65
Marshall 3	658	744.00	0.00	744.00
Marshall 4	660	380.73	0.00	380.73
Rockingham CT1	165	20.40	0.00	20.40
Rockingham CT2	165	0.00	712.92	712.92
Rockingham CT3	165	0.00	0.00	0.00
Rockingham CT4	165	240.77	236.85	477.62
Rockingham CT5	165	0.75	0.00	0.75